

Exhibit 11

**IN THE UNITED STATES DISTRICT COURT FOR THE
WESTERN DISTRICT OF PENNSYLVANIA
ERIE DIVISION**

BETTE EAKIN, *et al.*,

Plaintiffs,

v.

ADAMS COUNTY BOARD OF ELECTIONS, *et al.*,

Defendants.

Case No. 1:22-cv-00340-SPB

EXPERT DECLARATION OF DANIEL HOPKINS

Pursuant to 28 U.S.C. § 1746, I, Daniel Hopkins, hereby declare as follows:

1. I have personal knowledge of the matters in this declaration and can testify to them in court.

2. I am over eighteen years of age and am otherwise competent to testify.

I. Qualifications

3. I am a tenured Professor of Political Science at the University of Pennsylvania. I received a Ph.D. in Government from Harvard University in 2007, where I had previously received an A.B. in Social Studies in 2000 *Magna Cum Laude*. I have taught undergraduate and Ph.D.-level courses on elections and statistical methods at Yale University, Harvard University, Georgetown University, and the University of Pennsylvania since receiving my Ph.D. I have published more than 50 peer-reviewed academic articles, and I have also published writings in *The Washington Post*, FiveThirtyEight.com, and other general-interest venues. According to Google Scholar, my research has been cited by other scholars over 10,000 times. My published peer-reviewed work includes analyses of voter mobilization by election officials and of “naked ballots” cast outside of secrecy envelopes in Philadelphia County, Pennsylvania. Another article I co-authored examines

shifting presidential voting patterns in Pennsylvania (alongside other states) between 2012 and 2016. Additionally, my research has examined the effects of ballots in non-English languages as well as changes in policies related to voter identification. I am the author of *The Increasingly United States: How and Why American Political Behavior Nationalized*, a 2018 book published by the University of Chicago Press which analyzes federal, state, and local election results.

4. At the University of Pennsylvania, my responsibilities include teaching applied statistics to Ph.D. students as well as data science and American elections to undergraduates. I also serve as an associate editor of *Political Analysis*, the leading journal of statistical methodology within the discipline of political science. I previously served as an associate editor for the journal *Political Behavior*. I served on the White House Social and Behavioral Sciences Team in 2015. I also co-founded the Philadelphia Behavioral Science Initiative and served as the President of the Political Psychology section of the American Political Science Association.

5. My CV is appended to the end of this report.

6. I am being paid at a rate of \$400 per hour for my work related to this case. In the previous four years I have not testified as an expert witness at a trial or by deposition.

II. Summary of Opinions

7. Counsel for the plaintiffs in this case asked me to analyze the impact on voters caused by Pennsylvania's requirement that county board of elections reject mailed ballots contained in an undated or misdated envelope, a policy I refer to as the "date requirement."

8. In this declaration, I reach two main conclusions about the effect of the date requirement.

9. First, by increasing the "cost" of casting a successfully recorded vote, the date requirement imposes burdens on Pennsylvanians' ability to exercise their right to vote. Those burdens are not felt uniformly, as voters with fewer resources are less likely to be able to overcome

them. Prior research consistently finds that individuals with more resources—whether those resources are financial, educational, experiential, linguistic, or with respect to time, health, social networks, or mobility—are better able to adjust to increases in the costs of voting. For different reasons Black, Hispanic, and older voters in Pennsylvania may have lower levels of these resources on average. As a result, we might expect these groups to be particularly susceptible to increased costs of voting such as those caused by the date requirement.

10. Second, a quantitative analysis of mail ballots submitted in the 2022 general election confirms that expectation: the date requirement leads county boards of elections to reject ballots submitted by Black, Hispanic, and older voters at disproportionately higher rates. Moreover, I find that voters with higher levels of educational achievement are less likely to have their mail ballot rejected under the date requirement than those with lower levels of educational achievement.

III. The Date Requirement’s Impact on the Cost of Voting

11. In recent decades, research across the social sciences has emphasized how subtle changes in the costs and frictions involved in undertaking certain activities can influence their completion (e.g. Thaler and Sunstein 2009, Benartzi et al. 2017), and there is extensive evidence that procedural frictions can have meaningful impacts on who is able to interact with government, access benefits, or participate in other rights and responsibilities as citizens (Herd and Moynihan 2019).

12. This research is also relevant in assessing the impact of election laws and administration. For more than 50 years, researchers have analyzed the decision to vote using a “cost of voting” framework which emphasizes that, as the cost of voting rises, fewer citizens will participate in elections (Riker and Ordeshook 1968). As compared to many other high-income democracies, the United States has lower levels of voter turnout, and political scientists have

concluded that one of the causes of such depressed turnout is the cost borne by individual citizens in navigating our electoral system (Rosenstone and Hansen 1993, Highton 2004).

13. Even for citizens who choose to vote in a given election, procedural frictions may prevent them from successfully casting a vote for the candidate or measure of their choice and having that vote counted. Examples of such frictions that voters may experience include long lines at their polling station, not possessing the required form of identification, unavailability of a ballot in the voter's spoken language, confusion over how to properly mark or complete the ballot, and changes in polling-place locations (Spencer and Markovits 2010, Brady and McNulty 2011, Hopkins 2011, Hopkins et al. 2017).

14. The severity of the impact a friction will have on a voter depends on the voter's circumstances. Voters with the fewest resources available to them are often the least equipped to overcome increases in the costs of voting (Verba, Brady, and Schlozman 1995). Voters with lower education levels, for example, are less likely to be able to withstand increased administrative burdens in casting a valid ballot. Similarly, those lacking homes, cars, childcare, time off from work, English-language fluency, experience reading technical language, or other resources may be less able to bear increased costs associated with certain changes in the procedures for registering to vote and/or casting a valid ballot. As a result, particular frictions can have a disproportionately adverse impact on certain demographic groups, causing them to alter their behavior.

15. Because mail voting involves fewer costs for many voters, the voters most susceptible to increases in costs of voting may be more likely to vote by mail. The availability of mail ballots reduces the costs of voting on average by providing opportunities to vote without needing to travel to a polling place at a specified time (or determine the location of one's polling

place and whether it has changed). As such, mail voting has been linked to detectable increases in voter turnout (Gerber et al. 2013, Thompson et al. 2020).

16. In Pennsylvania, Black, Hispanic, and older residents are among the groups at particular risk when the costs of voting increase, as these groups have lower levels of some resources (on average) including educational attainment, income, economic security, English language proficiency and literacy, and health (Jencks and Phillips 2011, Phelan and Link 2015, Chetty et al. 2020, Semega and Kollar 2022).

17. Studies of voting behavior suggest that Black, Hispanic, and older residents vote by mail at disproportionate rates. Brady and McNulty (2011) find that older voters are especially likely to respond to a polling place relocation by switching to mail voting. In the 2020 general election, a U.S. Census Bureau report found that those 65 years and older were especially likely to use non-traditional voting methods such as voting by mail, and that voters identifying as non-Hispanic Black, non-Hispanic Asian American, and Hispanic were all more likely to use non-traditional voting methods (like mail voting) than were non-Hispanic White voters (Scherer 2021).

18. To be sure, voting by mail involves administrative frictions to which certain voters may be especially susceptible (Stewart 2020). Mail voters must comply with instructions including the use of secrecy envelopes (Hopkins et al. 2022) and the proper completion of their ballot, and they usually do so without the presence of an election official who can answer questions. These frictions have disproportionate effects on certain demographic groups of voters. Generally, non-White voters are more likely to have their mail ballots rejected than White voters (Baringer et al. 2020, Hopkins et al. 2022, Shino et al. 2022). An analysis of Philadelphia voters in the 2020 election shows that older voters and voters from racial/ethnic minority backgrounds were more likely than other voters to have their mail ballot rejected because they failed to place it within a

secrecy envelope (Hopkins et al. 2022). Another study shows that first-time mail voters are more likely to have their ballots rejected as well (Cottrell et al. 2021).

19. Once a county board rejects a mail ballot due to noncompliance with the date requirement, they may offer the voter an opportunity to “cure” the ballot, or they may simply reject it outright, in which case the voter’s only recourse is to come to their polling place. This is a significant friction that increases the cost of voting for those who fail to properly date their mail ballot. That increased cost may be especially pronounced for voters who do not learn in a timely way that their ballot has been rejected or are unable to get to their polling station during voting hours on election day due to work commitments or mobility limitations (Haspel and Knotts 2005, Brady and McNulty 2011, Hopkins 2016).

20. In sum, the date requirement increases the cost of voting and imposes the heaviest burdens on individuals who are already highly vulnerable to cost increases and are less likely to overcome them. In Pennsylvania, Black, Hispanic, and older voters on average are less equipped to navigate such cost increases and added burdens compared to the rest of the voting population. As a result, we might expect voters in these demographic groups to be affected by the date requirement at a disproportionate rate. The next section of this report confirms that hypothesis.

IV. The Date Requirement’s Disparate Impact

21. To determine whether the date requirement disproportionately impacts particular demographic groups of voters, I used an analysis called linear regression. Linear regression is a very commonly used statistical tool which enables researchers to identify patterns of correlation among several variables. It is among the most commonly employed tools in statistics.

22. Using data from the 2022 general election, I analyzed the extent to which demographic groups of voters are disproportionately impacted at two levels: the county level

(using data from all Pennsylvania counties) and the Census block-group level (using data from a representative sample of counties).

23. As described in more detail below, these analyses demonstrate that older, Black, and Hispanic voters were disproportionately likely to submit mail ballots that were rejected due to a failure to satisfy the date requirement.

24. It is important to note that, in these analyses, I compared mail ballots that were rejected under the date requirement to all *mail* ballots, as opposed to all ballots regardless of voting method. From a statistical perspective, the former comparison is more meaningful than the latter because, unlike voters who submit ballots by mail, voters who cast their ballot in person are not subject to the date requirement. However, by comparing mail ballots that were rejected under the date requirement to all mail ballots (as opposed to all ballots generally), these analyses have the potential to understate the date requirement's overall disproportionate impacts because—as prior research has shown—older, Black, and Hispanic voters have been more likely to vote by mail in recent elections (Scherer 2021).

A. County-Level Analysis

25. County-level analysis can be a valuable first step which indicates county-level differences in the fraction of mail ballots which are received without correct dates. It can demonstrate whether ballots are being rejected at uniform or varied rates among counties and also indicate which attributes of counties are associated with higher or lower ratios of mail ballots set aside due to date issues. However, analyses at lower levels of aggregation (such as block group, discussed below) are a crucial supplement to determine what groups of *voters*—instead of simply what types of counties—are more prone to cast mail ballots with date issues at a higher rate.

26. To perform the county-level analysis, I first compiled a spreadsheet containing the county boards of elections' responses to Plaintiffs' Interrogatories 1 and 2, which respectively

provided the number of mail ballots returned in the 2022 general election and the number of mail ballots that were rejected due to a failure to comply with the date requirement. This allowed me to calculate the ratio of mail ballots rejected in each county under the date requirement. This ratio figure is more useful than the raw number of rejected ballots because of the significant population variation among the counties.

27. One noticeable characteristic of these data was that the counties rejected ballots at substantially varied rates. The mean value of the ratio of mail ballots rejected under the date requirement to total mail ballots received is 0.0093, with a minimum of 0 and median of 0.0068. This variation does not appear to track counties' size or geographic region within Pennsylvania.

28. The next step of this analysis was to obtain county-level data published in the 2021 5-year estimates from the American Community Survey as well as the 2020 5-year American Community Survey (which contains limited English proficiency) and the Atlas of U.S. Elections published by David Leip. These sources are commonly used by political scientists to study American elections. Using these sources, I generated county-level measures of the following demographic characteristics: the share of residents 65 years old or older; the share of residents who identify as non-Hispanic and White; the share of residents who identify as non-Hispanic and Black; the share of residents who identify as Hispanic; the share of residents 25 years old and older who have obtained at least a bachelor's degree; median household income; the share of residents with limited English skills; the county's population; and the share of counted ballots cast in the 2020 general election containing votes for Joseph Biden. All of the share measures vary from 0 (no voters in the county) to 1 (all voters in the county).

29. Next, I regressed the ratio of ballots rejected in each county (described above) on this county-level demographic data and the county's logged total population.¹

30. The statistically significant results of this regression are found below in **Exhibit 1**. The regression coefficients in this figure reflect the expected change in the outcome variable—the ratio of ballots set aside due to the lack of a date or an incorrect date—given a one-unit change in the independent variable in question.

Exhibit 1. *This table presents the statistically significant ($p < 0.05$) results of a linear regression of the ratio of rejected mail ballots on the factors listed above for all 67 Pennsylvania counties. Each coefficient reflects the change in the ratio associated with a one-unit change in the listed variable.*

Variable	Coefficient	Std. Error
Co. Share Black	0.1351*	0.0354
Co. Share Hispanic	0.1383*	0.0503

31. These results demonstrate that counties with a higher proportion of Black and Hispanic mail voters rejected ballots at a higher rate than counties with a lower proportion of voters from those demographic groups. These results are both substantively and statistically significant.

32. The results of the regressions indicate that if a hypothetical county shifts from none of its residents identifying as Hispanic to all residents identifying as Hispanic, we would expect a 0.138 increase in the ratio of ballots rejected under the date requirement. Even for just a 5.3 percentage-point increase in a county's population of Hispanic residents, we would expect a 0.0073 increase in the ratio of ballots rejected. This effect size is quite large substantively considering that the average ratio of rejection under the date requirement across all counties is 0.0093. When baseline rates are low, even seemingly small changes can be quite meaningful. Put

¹ "Logging" means that I employed a common transformation which takes the natural log of a given variable to reduce the weight of outliers for skewed variables such as population.

simply, counties with more Hispanic residents relative to the total population will be expected to cast a higher ratio of ballots set aside for date issues.

33. We find a similar relationship for each county's share of Black residents. The regression results indicate that if a hypothetical county shifts from no Black residents to all Black residents, we would expect a 0.135 increase in the ratio of rejected ballots under the date requirement. Consider two counties, one in which Black residents make up 5.4% of the population (which happens to be York County's Black population) and another in which 12.5% of the population is Black (which happens to be the percentage in Allegheny County, as well as close to the national figure). If we shifted from a county in which Black residents increase from 5.4% to 12.5% (all else equal), we should expect the ratio of mail ballots rejections under the date requirement to increase by 0.00965. That means that a relatively small increase in the share of a county's population that is Black is associated with roughly double the number of mail ballots being rejected relative to the average county. That is by any estimation a very strong association. Counties with larger shares of Black residents have notably higher ratios of mail ballots with date issues than counties with smaller Black population shares.

34. For both Black and Hispanic voters, the relationship between their share of the county population and the rate of rejected ballots is statistically significant at the $p < 0.05$ level. This means that the patterns identified above are extremely unlikely to have emerged by random chance alone. Social scientists routinely use this $p < 0.05$ level as strong evidence that a relationship between two variables is meaningful as opposed to mere coincidence.

35. While none of the other variables were associated with the county-level ratio of mail ballots set aside for date issues at statistically significant levels, analyses at a more granular level provide a more accurate depiction of the relationship between mail-ballot rejections and voter

characteristics (rather than mail-ballot rejections and *county* characteristics). That requires alternative techniques, which I report next.

B. Individual and Block-Group Level Analysis

36. My next analyses use individual-level records, with demographic variables appended at the block-group level, to predict which voters were more or less likely to have their mail ballot rejected in 2022 because of a date issue. Block groups are the smallest unit at which Census data is typically available publicly; they are small geographic units containing between 600 and 3,000 people in most cases (U.S. Census Bureau 2023).

37. To compile the data necessary for this analysis, I downloaded the February 6, 2023 Pennsylvania statewide voter file from the Pennsylvania Secretary of State's website. The statewide voter file provides information on voter's party of registration, vote history, and vote method, all of which are essential for analyzing which voters were more or less likely to cast mail ballots that would be rejected due to a date issue.

38. I then merged those voters' records in the voter file with lists of individual voters whose mail ballots were rejected in 2022 due to noncompliance with the date requirement, which was provided by the county boards in response to Plaintiffs' Interrogatory 7.

39. Because the task of merging this information was extremely time intensive, I was unable to analyze every one of Pennsylvania's 67 counties in this way in the time allotted. As a result, I analyzed a collective sample of counties: Allegheny, Blair, Delaware, Lancaster, Lehigh, Lycoming, Northampton,² Northumberland,³ Philadelphia, and Potter. This sample includes a

² The Northampton County Board of Elections' response to Interrogatory 7 did not provide an adequately efficient way to determine whether each voter's ballot was undated or whether it was misdated. As a result, below I include the Northampton County data in my analysis of all rejected ballots, but I exclude them from the reason-specific analyses that examines undated and misdated ballots separately.

³ The Northumberland County Board of Elections rejected ballots under the date requirement only due to missing dates; it did not receive any misdated ballots in the 2022 general election. As a result, I did not use any data from Northumberland in the analysis focusing exclusively on misdated ballots.

diverse range of counties drawn from all over the Commonwealth, including high-population, Democratic-leaning counties such as Philadelphia and Allegheny as well as small, Republican counties such as Blair, Lycoming, and Potter. It also includes several counties that are politically competitive such as Lehigh. Economic conditions in these counties vary, including heavily agricultural Lancaster.

40. I then used Geocodio to geocode the addresses listed in the voter file for all voters in these counties. Doing so enabled me to append various demographic measures derived from the American Community Survey at the level of the block group. I then generated measures for the share of the block group in various categories analogously to the county-level data preparation described above. Specifically, for each county, I generated measures of the share of residents 75 years and older, the share of residents who identify as Hispanic, the share of residents who identify as non-Hispanic Black, the share of residents who identify as non-Hispanic Asian American, the share of residents with a Bachelor's degree, and the median household income. I also generated individual-level measures of those registered as Democrats and Republicans as well indicator variables denoting those who did not vote in 2020 and those who cast a mail ballot in 2020. I also generated indicator variables for each county, meaning that I employed county-level fixed effects to address unobserved heterogeneity across counties. Following standard practice in political and social science, I include variables even if they do not have statistically significant effects in the models because doing so helps isolate the effects of interest for key variables. By including other measures, we can rule out these factors as "omitted variables" which explain our effects, and in places estimate key effects with more statistical precision.

41. I performed regression analyses on three outcomes variables: 1) a binary indicator variable indicating voters whose mail ballots were rejected because they were undated or misdated;

2) a binary indicator variable indicating voters whose mail ballots were rejected because they were undated; and 3) a binary indicator for voters whose mail ballots were rejected because they were misdated.

42. When I regress an indicator variable for all ballots rejected due to noncompliance with the date instructions—whether because the ballot was undated or misdated—I find strong, statistically significant and substantively meaningful relationships indicating that Hispanic, Black, and older voters are more likely to submit ballots that are rejected under the date requirement (see **Exhibit 2**).

43. Among the counties examined, Hispanic voters overall were more likely to have their ballots rejected under the date requirement than mail voters from other ethnic/racial groups. The share of Hispanic residents in a voters' block group is positively associated with casting a mail ballot which was segregated due to a date issue, with a coefficient of 0.014 with a 95% confidence interval from 0.011 to 0.016. This means that, on average, if the Hispanic population of a block group increases by 25 percentage points, we would expect a 0.3 percentage-point increase in rejected ballots. Given that the overall rate of rejected mail ballots in this sample is only 0.9 percent, that effect is substantively very large; an all-Hispanic block group would be expected to have a rate of rejection that is roughly double that of a block group with no Hispanic residents.

44. Voters from block groups where Black voters make up a larger portion of the population were also more likely to cast a mail ballot that was rejected under the date requirement compared to mail voters from block groups with other demographics. For Black residents, the estimate is similar, at 0.010 with a 95% confidence interval from 0.009 to 0.012. If the percentage of a mail voter's block group that identifies as Black increases from 0% to 25%, we should expect

the probability that the voter casts a ballot with date issues to increase by 0.26 percentage points. Again, this effect is very large when considering that the baseline rate of casting rejected ballots is just 0.9 percent.

45. Voter age is also positively associated with casting mail ballots with date issues, with a coefficient of -0.000093. Comparing two individuals who differ in age by 40 years, this coefficient indicates that the older voter is 0.37 percentage points more likely to cast a mail ballot with a date issue.

46. It is also worth noting that voters who had previously cast a successful mail ballot in 2020 were less likely to cast a mail ballot in 2022 with a date issue (coefficient is -0.0049). This suggests that voters less familiar with the mail-voting process are more likely to make mistakes that cause their mail ballot to be rejected.

47. We also see a significant relationship between education levels and ballot rejections, with block groups containing a larger portion of residents with Bachelor's degrees submitting fewer undated or misdated ballots.

48. All the coefficients discussed here are statistically significant at the $p < 0.05$ level.

Exhibit 2: *This table presents the statistically significant ($p < 0.05$) results of a linear regression of the ratio of undated or misdated mail ballots received on the individual-level and block-group level demographic measures discussed above. County fixed effects included but not shown.*

Variable	Coefficient	Std. Error
BG Share Hispanic	0.013756*	0.001367
BG Share Black	0.010448*	0.000687
BG Share with BA	-0.004479*	0.000857
BG Share 75+	0.002779*	0.000917
Year of Birth	-0.000093*	0.000008
Mail Vote 2020	-0.004887*	0.000502

49. These trends are essentially the same when looking only at *undated* ballots (see **Exhibit 3**).

50. The coefficient for the voter's block group percent Hispanic is 0.0086 with a 95% confidence interval from 0.0062 to 0.011. This means that on average, a voter in a block group that is entirely Hispanic would be 0.86 percentage points more likely to cast a mail ballot with no date than an otherwise similar voter in the same county whose block group had no Hispanic residents. Here yet again, such a difference is remarkably large given the baseline rejection rate of 0.64 percent.

51. The coefficient associated with the block group's percentage of residents who are Black is similar, at 0.0092 with a 95% confidence interval from 0.0080 to 0.010. This means that, on average, a voter in a block group that is entirely Black would be 0.9 percentage points more likely to cast an undated mail ballot than an otherwise similar voter in the same county whose block group had no Black residents.

52. As for age, the coefficient indicates that when comparing a 20-year-old to a 60-year-old, we should expect the 60-year-old to be 0.2 percentage points more likely to cast a mail ballot lacking a date.

53. Once again, we also see that those who previously voted by mail in 2020 were significantly less likely to submit an undated ballot.

54. And also again, we see that block groups with a larger share of residents with Bachelor's degrees sent fewer undated ballots.

55. All the coefficients discussed here are statistically significant at the $p < 0.05$ level.

Exhibit 3: *This table presents the statistically significant ($p < 0.05$) results of a linear regression of the ratio of undated mail ballots on individual-level and block-group level measures discussed above. County fixed effects included but not shown.*

Variable	Coefficient	Std. Error
BG Share Hispanic	0.008553*	0.001204
BG Share Black	0.009187*	0.000584
BG Share with BA	-0.004666*	0.000735
Year of Birth	-0.000060*	0.000007
Mail Vote 2020	-0.003670*	0.000432

56. Finally, the same trends generally hold when looking only at *misdated* ballots (see **Exhibit 4**). Voters in block groups with more Hispanic residents are more likely to cast mail ballots with incorrect dates, as are voters in block groups with larger Black population shares. Voters who are older are also more likely to cast mail ballots with an incorrect date: a 60-year-old is 0.13 percentage points more likely to cast a mail ballot with an incorrect date than an otherwise similar 20-year-old. And those who had previously voted by mail in 2020 were again less likely to submit a misdated ballot.

57. All the results just discussed are statistically significant at the $p < 0.05$ level.

Exhibit 4: *This table presents the statistically significant ($p < 0.05$) results of a linear regression of the ratio of misdated mail ballots received on the individual-level and block-group level measures discussed above. County fixed effects included but not shown.*

Variable	Coefficient	Std. Error
BG Share Hispanic	0.005260*	0.000762
BG Share Black	0.001230*	0.000370
BG Share 75+	0.000986*	0.000497
BG Med Income	-0.000061*	0.000024
Year of Birth	-0.000033*	0.000004
Mail Vote 2020	-0.001050*	0.000276

I reserve the right to supplement this declaration in light of additional facts, testimony and/or materials that may come to light. I declare under penalty of perjury that the foregoing is true and correct.



Dated: March 29, 2023

Daniel Hopkins

References

- Baringer, Anna, Michael C. Herron, and Daniel A. Smith. "Voting by mail and ballot rejection: Lessons from Florida for elections in the age of the coronavirus." *Election Law Journal: Rules, Politics, and Policy* 19, no. 3 (2020): 289-320.
- Benartzi, Shlomo, John Beshears, Katherine L. Milkman, Cass R. Sunstein, Richard H. Thaler, Maya Shankar, Will Tucker-Ray, William J. Congdon, and Steven Galing. "Should governments invest more in nudging?." *Psychological science* 28, no. 8 (2017): 1041-1055.
- Brady, Henry E., and John E. McNulty. "Turning out to vote: The costs of finding and getting to the polling place." *American Political Science Review* 105, no. 1 (2011): 115-134.
- Chetty, Raj, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter. "Race and economic opportunity in the United States: An intergenerational perspective." *The Quarterly Journal of Economics* 135, no. 2 (2020): 711-783.
- Cottrell, David, Michael C. Herron, and Daniel A. Smith. "Vote-by-mail ballot rejection and experience with mail-in voting." *American Politics Research* 49, no. 6 (2021): 577-590.
- Garcia Bedolla, Lisa, and Melissa R. Michelson. *Mobilizing inclusion: Transforming the electorate through get-out-the-vote campaigns*. Yale University Press, 2012.
- Gerber, Alan S., Gregory A. Huber, and Seth J. Hill. "Identifying the effect of all-mail elections on turnout: Staggered reform in the evergreen state." *Political Science research and methods* 1, no. 1 (2013): 91-116.
- Green, Donald P., and Alan S. Gerber. *Get out the vote: How to increase voter turnout*. Brookings Institution Press, 2019.
- Haspel, Moshe, and H. Gibbs Knotts. "Location, location, location: Precinct placement and the costs of voting." *The Journal of Politics* 67, no. 2 (2005): 560-573.
- Hopkins, Daniel. 2016. "A Transit Strike in Philly Could Lower Turnout, Especially among Black and Poor Voters." FiveThirtyEight.com November 6th. URL: <https://fivethirtyeight.com/features/a-transit-strike-in-philly-could-lower-turnout-among-black-and-poor-voters/> [accessed March 26th, 2023]
- Herd, Pamela, and Donald P. Moynihan. *Administrative burden: Policymaking by other means*. Russell Sage Foundation, 2019.
- Highton, Benjamin. "Voter registration and turnout in the United States." *Perspectives on Politics* 2, no. 3 (2004): 507-515.
- Hopkins, Daniel J. "Translating into votes: the electoral impacts of Spanish-language ballots." *American Journal of Political Science* 55, no. 4 (2011): 814-830.

Hopkins, Daniel J., Marc Meredith, Anjali Chainani, and Nathaniel Olin. "Whose Vote Is Lost by Mail? Evidence from Philadelphia in the 2020 General Election." *Election Law Journal: Rules, Politics, and Policy* 21, no. 4 (2022): 329-348.

Hopkins, Daniel J., Marc Meredith, Michael Morse, Sarah Smith, and Jesse Yoder. "Voting but for the law: Evidence from Virginia on photo identification requirements." *Journal of Empirical Legal Studies* 14, no. 1 (2017): 79-128.

Hopkins, Daniel, Susanne Schwarz, and Anjali Chainani. "Officially Mobilizing: Repeated Reminders and Feedback from Local Officials Increase Turnout." (2022).

Jencks, Christopher, and Meredith Phillips, eds. *The Black-White test score gap*. Brookings Institution Press, 2011.

Phelan, Jo C., and Bruce G. Link. "Is racism a fundamental cause of inequalities in health?." *Annual Review of Sociology* 41 (2015): 311-330.

Riker, William H., and Peter C. Ordeshook. "A Theory of the Calculus of Voting." *American political science review* 62, no. 1 (1968): 25-42.

Rosenstone, Steven J., and John Mark Hansen. *Mobilization, participation, and democracy in America*. Longman Publishing Group, 1993.

Scherer, Zachary. 2021. "A Majority of Voters Used Nontraditional Methods to Cast Ballots in 2020." United States Census Bureau. URL: <https://www.census.gov/library/stories/2021/04/what-methods-did-people-use-to-vote-in-2020-election.html> [accessed March 24, 2023]

Semega, Jessica and Melissa Kollar. 2022. "Income in the United States: 2021." United States Census Bureau. <https://www.census.gov/library/publications/2022/demo/p60-276.html> [accessed March 29th, 2023]

Shino, Enrijeta, Mara Suttman-Lea, and Daniel A. Smith. "Determinants of rejected mail ballots in georgia's 2018 general election." *Political Research Quarterly* 75, no. 1 (2022): 231-243.

Spencer, Douglas M., and Zachary S. Markovits. "Long lines at polling stations? Observations from an election day field study." *Election Law Journal* 9, no. 1 (2010): 3-17.

Stewart III, Charles H. "Reconsidering lost votes by mail." *Harvard Data Science Review* 2, no. 4 (2020).

Thaler, Richard H., and Cass R. Sunstein. *Nudge: Improving decisions about health, wealth, and happiness*. Penguin, 2009.

Thompson, Daniel M., Jennifer A. Wu, Jesse Yoder, and Andrew B. Hall. "Universal vote-by-

mail has no impact on partisan turnout or vote share." *Proceedings of the National Academy of Sciences* 117, no. 25 (2020): 14052-14056.

United States Census Bureau. 2023. "Glossary." Available online at:
https://www.census.gov/programs-surveys/geography/about/glossary.html#par_textimage_4
[accessed March 19, 2023]

Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. *Voice and equality: Civic voluntarism in American politics*. Harvard University Press.

Daniel J. Hopkins

Curriculum Vitae

January 25th, 2023

Address

Department of Political Science
Ronald O. Perelman Center for Political Science and Economics
University of Pennsylvania
133 S. 36th Street
Philadelphia, PA 19104
danhop (at) sas (dot) upenn (dot) edu
<http://www.danhopkins.org>

Education

Ph.D. in Government, Harvard University *November 2007*
Dissertation Committee: Robert D. Putnam (Chair), Gary King, Claudine Gay, and Andrea L. Campbell

B.A. IN SOCIAL STUDIES, MAGNA CUM LAUDE, HARVARD COLLEGE *JUNE 2000*

ACADEMIC EMPLOYMENT

Professor (with tenure), University of Pennsylvania *July 2018 – present*
Primary Appointment: Department of Political Science
Secondary Appointment: Annenberg School for Communication

Associate Professor (with tenure), University of Pennsylvania *July 2015 – June 2018*

Senior Fellow, Leonard Davis Institute of Health Economics *January 2016 - present*

Visiting Professor, University of Copenhagen *January 2016 - present*

Associate Professor (with tenure), Georgetown University *August 2013 – July 2015*

Fellow, U.S. Social and Behavioral Sciences Team *January 2015 – July 2015*

Assistant Professor, Georgetown University *August 2009 – July 2013*

Post-Doctoral Fellow and Lecturer, Harvard University *July 2008 – July 2009*

Post-Doctoral Fellow, Yale University *Sept. 2007 – June 2008*

ACADEMIC HONORS

- Visiting Scholar, Russell Sage Foundation (spring 2022)
- Best Paper with a Pre-registration Award, *Journal of Experimental Political Science* (joint with Cheryl Kaiser, Efrén O. Pérez, Sara Hagá, Corin Ramos, and Michael Zárate; 2021)
- American Political Science Association Citizenship and Migration Section Best Article Prize (joint with Gregory Huber and Seth J. Hill; 2020)
- Recipient of Pi Sigma Alpha's Henry Teune Award for advancing undergraduate education (2020)
- *Political Research Quarterly* Outstanding Reviewer Award (2019)
- Named Clarence Stone Scholar by the Urban Politics section of the American Political Science Association (2015)
- Awarded Society of Political Methodology's Miller Prize for the best work appearing in *Political Analysis* in the prior year with Jens Hainmueller and Teppei Yamamoto (2015)
- Emerging Scholar Award from the Elections, Public Opinion, and Voting Behavior Section of the American Political Science Association (2014)
- Awarded Editor's Choice paper by *Political Analysis* with Jens Hainmueller and Teppei Yamamoto (2014)
- Awarded Best Paper by the Elections, Public Opinion, and Voting Behavior Section of the American Political Science Association with Jens Hainmueller (2013)
- Winner with Jens Hainmueller and Teppei Yamamoto, Time-sharing Experiments in the Social Sciences Competition (2013)
- Winner, Time-sharing Experiments in the Social Sciences Competition (2011)
- Awarded Best Paper by the Political Organizations and Parties Section of the American Political Science Association with Lee Drutman (2011)
- Awarded Deil Wright Best Paper Award by the Federalism and Intergovernmental Relations Section of the American Political Science Association (2009)
- Awarded E.E. Schattschneider Award by the American Political Science Association for the best doctoral dissertation in the field of American Government (2008)
- Awarded Harvard University Graduate School of Arts and Sciences' Richard J. Herrnstein Prize for "best dissertation that exhibits excellent scholarship, originality, breadth of thought, and a commitment to intellectual independence" (2008)
- Awarded Harvard University's Charles Toppan Prize for best dissertation in political science (2008)
- Named Graduate Fellow, American Academy of Political and Social Science (2008)
- Winner with Van Tran and Abigail Williamson, Special Time-sharing Experiments in the Social Sciences Competition (2007)
- Received award for the best poster at the Summer Meeting of the Society for Political Methodology (2007)
- Winner with Gary King, Third Annual Time-sharing Experiments in the Social Sciences Competition (2005)
- Graduate Student Associate, Institute for Quantitative Social Science (2004-7)
- Awarded Fainsod Prize (2002)
- Awarded Hoopes Prize for senior thesis on the Spanish Civil War (2000)
- Inducted to Phi Beta Kappa as a junior (1999)
- Awarded Center for European Studies, Weatherhead Center for International Affairs Fellowships (1999)

PUBLISHED WORK: BOOKS

2. Daniel J. Hopkins. 2023. *Stable Condition: Elites' Limited Influence on Health Care Attitudes*. Forthcoming. New York, NY: Russell Sage Foundation.

1. Daniel J. Hopkins. 2018. *The Increasingly United States: How and Why American Political Behavior Nationalized*. Chicago, IL: University of Chicago Press.

PUBLISHED WORK: SCHOLARLY ARTICLES

54. Daniel J. Hopkins, Cheryl Kaiser, and Efrén O. Pérez. Forthcoming. "The Surprising Stability of Asian Americans' and Latinos' Partisan Identities in the Early Trump Era." *Journal of Politics*.

53. Daniel J. Hopkins, Eric Schickler, and David L. Azizi. 2022. "From Many Divides, One? The Polarization and Nationalization of American State Party Platforms, 1918-2017." *Studies in American Political Development*. 36(1):1-20.

52. Kirk Bansak, Jens Hainmueller, Daniel J. Hopkins, and Teppei Yamamoto. 2022. "Using Conjoint Experiments to Analyze Elections: The Essential Role of the Average Marginal Component Effect." *Political Analysis*.

51. Daniel J. Hopkins. 2022. "Stable Views in a Time of Tumult: Assessing Trends in American Public Opinion, 2007-2020." *British Journal of Political Science*.

50. Daniel J. Hopkins, Susanne Schwarz, and Anjali Chainani. 2022. "Officially Mobilizing: Repeated Reminders and Feedback from Local Officials Increase Turnout." *Journal of Politics*.

49. Daniel J. Hopkins and Hans Noel. 2022. "Trump and the Shifting Meaning of 'Conservative': Using Activists' Pairwise Comparisons to Measure Politicians' Perceived Ideologies." *American Political Science Review*. 116(3):1133-1140.

48. Daniel J. Hopkins, Marc Meredith, Anjali Chainani, and Nathaniel Olin. 2022. "Whose Vote Is Lost by Mail? Evidence from Philadelphia in the 2020 General Election." *Election Law Journal* 21(4):329-348.

47. David Yokum, Daniel J. Hopkins, Andrew Feher, Elana Safran, and Joshua Peck. 2022. "Effectiveness of Behaviorally Informed Letters on Health Insurance Marketplace Enrollment: A Randomized Clinical Trial." *JAMA Health Forum* 3(3):e220034.

46. Alexandra Golos, Daniel J. Hopkins, Syon P. Bhanot, and Alison M. Buttenheim. 2022. "Partisanship, Messaging, and the COVID-19 Vaccine: Evidence from Survey Experiments." *American Journal of Health Promotion*. 36(4):602-611.

45. Seth Hill, Daniel J. Hopkins and Gregory Huber. 2021. "Not by Turnout Alone: Measuring the Sources of Electoral Change, 2012-2016." *Science Advances* 17(7).

44. Daniel J. Hopkins, Marc Meredith, Anjali Chainani, Nathaniel Olin, and Tiffany Tse. 2021.

“Results from a 2020 field experiment encouraging voting by mail.” *Proceedings of the National Academy of Sciences* 118(4):1-3.

43. Will Hobbs and Daniel J. Hopkins. 2021. “Offsetting Policy Feedback Effects: Evidence from the Affordable Care Act.” *The Journal of Politics*. 83(4):1800-1817.

42. Kirk Bansak, Jens Hainmueller, Daniel J. Hopkins, and Teppei Yamamoto. 2021. “Beyond the Breaking Point? Survey Satisficing in Conjoint Experiments.” *Political Science Research and Methods*, 9(1):53-71.

41. Daniel J. Hopkins. 2021. “The Activation of Prejudice and Presidential Voting: Panel Evidence from the 2016 U.S. Election.” *Political Behavior*, 43:663-686.

40. Daniel J. Hopkins and Samantha Washington. 2020. “The Rise of Trump, the Fall of Prejudice? Tracking White Americans’ Racial Attitudes 2008-2018 via a Panel Survey.” *Public Opinion Quarterly*, 84(1):119-140.

39. Seth Hill, Daniel J. Hopkins and Gregory Huber. 2019. “Demographic Change, Threat, and Presidential Voting: Evidence from U.S. Electoral Precincts, 2012-2016.” *Proceedings of the National Academy of Sciences*. 116(50):25023-25028

38. Seth Goldman and Daniel J. Hopkins. 2019. “Past Place, Present Prejudice: The Impact of Adolescent Racial Content on White Racial Attitudes.” *Journal of Politics*, 82(2):529-542.

37. Daniel J. Hopkins, Cheryl Kaiser, Efrén O. Pérez, Sara Hagá, Corin Ramos, and Michael Zárate. 2019. “Does Perceiving Discrimination Influence Partisanship among U.S. Immigrant Minorities?” *Journal of Experimental Political Science*, 7(2):112-136.

36. Daniel J. Hopkins, John Sides, and Jack Citrin. 2019. “The Muted Consequences of Correct Information on Immigration.” *Journal of Politics*, 81(1):315-320.

35. Daniel J. Hopkins and Kalind Parish. 2019. “The Medicaid Expansion and Attitudes toward the Affordable Care Act.” *Public Opinion Quarterly*, 83(1):123-34.

34. Seth Goldman and Daniel J. Hopkins. 2019. “When Can Exemplars Shape White Racial Attitudes? Evidence from the 2012 U.S. Presidential Campaign.” *International Journal of Public Opinion Research*, 31(4):649-668.

33. Daniel J. Hopkins. 2018. “The Exaggerated Life of Death Panels: The Limits of Framing Effects in the 2009-2012 Health Care Debate.” *Political Behavior*, 40(3):681-709.

32. Daniel J. Hopkins and Lindsay Pettingill. 2018. “Retrospective Voting in Big-City U.S. Mayoral Elections.” *Political Science Research and Methods*, 6(4):697-714.

31. Bansak, Kirk, Jens Hainmueller, Daniel J. Hopkins, and Teppei Yamamoto. 2018. "The Number of Choice Tasks and Survey Satisficing in Conjoint Experiments." *Political Analysis*. 26(1):112-119.
30. Daniel J. Hopkins, Eunji Kim, and Soojong Kim. 2017. "Does newspaper coverage influence or reflect public perceptions of the economy?" *Research and Politics* (October-December):1-7.
29. Daniel J. Hopkins and Jonathan Mummolo. 2017. "Assessing the Breadth of Framing Effects." *Quarterly Journal of Political Science* 12(1):37-57.
28. Daniel J. Hopkins, Marc Meredith, Michael Morse, Sarah Smith, and Jesse Yonder. 2017. "Voting but for the Law: Evidence from Virginia on Photo Identification Requirements." *Journal of Empirical Legal Studies*, 14(1):79-128.
27. Daniel Preotiuc-Pietro, Ye Liu, Daniel J. Hopkins, and Lyle Ungar. 2017. "Beyond Binary Labels: Political Ideology Prediction of Twitter Users." *Proceedings of the 55th Annual Meeting of the Association for Computational Linguistics*. Vancouver, Canada, July 30th-August 4th: 729-740.
26. Bailey, Michael A., Daniel J. Hopkins, and Todd Rogers. 2016. "Unresponsive, Unpersuaded: The Unintended Consequences of Voter Persuasion Efforts." *Political Behavior*, 38(3):713-46.
25. Daniel J. Hopkins, Jonathan Mummolo, Victoria Esses, Cheryl Kaiser, Helen Marrow, and Monica McDermott. 2016. "Out of Context: The Unexpected Absence of Spatial Variation in U.S. Immigrants' Perceptions of Discrimination." *Politics, Groups, and Identities*, 4(3):363-392.
24. Jens Hainmueller and Daniel J. Hopkins. 2015. "The Hidden American Immigration Consensus: A Conjoint Analysis of Attitudes toward Immigrants." *American Journal of Political Science*, 59(3):529-548.
23. Daniel J. Hopkins. 2015. "The Upside of Accents: Language, Skin Tone, and Attitudes toward Immigration." *British Journal of Political Science*, 45(3):531-557.
22. Daniel J. Hopkins. 2014. "One Language, Two Effects: Partisanship and Responses to Spanish." *Political Communication*, 31(3):421-455.
21. Daniel J. Hopkins and Jonathan M. Ladd. 2014. "The Consequences of Broader Media Choice: Evidence from the Expansion of Fox News." *Quarterly Journal of Political Science*, 9(1):115-135.
20. Daniel J. Hopkins, Van C. Tran, and Abigail Fisher. 2014. "See No Spanish: Language, Local Context, and Attitudes toward Immigration." *Politics, Groups, and Identities*, 2(1):35-51.

19. Jens Hainmueller and Daniel J. Hopkins. 2014. "Public Attitudes toward Immigration." *Annual Review of Political Science*, 17:225-249.
18. Jens Hainmueller, Daniel J. Hopkins, and Teppei Yamamoto. 2014. "Causal Inference in Conjoint Analysis: Understanding Multi-Dimensional Choices via Stated Preference Experiments." *Political Analysis*, 22(1):1-30.
17. Lee Drutman and Daniel J. Hopkins. 2013. "The Inside View: Using the Enron Email Archive to Understand Corporate Political Attention." *Legislative Studies Quarterly*. 38(1):5-30.
16. Daniel J. Hopkins and Katherine T. McCabe. 2012. "After It's Too Late: Estimating the Policy Impacts of Black Mayoralities in U.S. Cities." *American Politics Research*. 40(4):665-700.
15. Daniel J. Hopkins. 2012. "Flooded Communities: Explaining Local Reactions to the Post-Katrina Migrants." *Political Research Quarterly*. 65(2):443-459.
14. Daniel J. Hopkins. 2012. "Perceptions of Economic Performance during Unequal Growth." *Public Opinion Quarterly*. 76(1):50-70.
13. Daniel J. Hopkins and Thad Williamson. 2012. "Inactive by Design: The Elements of Suburban Sprawl that Reduce Political Participation." *Political Behavior*. 34(1):79-101.
12. Daniel J. Hopkins. 2011. "Translating Into Votes: The Electoral Impacts of Spanish-Language Ballots." *American Journal of Political Science*. 55(4):814-830.
11. Daniel J. Hopkins. 2011. "National Debates, Local Responses: The Origins of Local Concern about Immigration in the U.K. and the U.S." *British Journal of Political Science*. 41(3):499-524.
10. Elisabeth R. Gerber and Daniel J. Hopkins. 2011. "When Mayors Matter: Estimating the Impact of Mayoral Partisanship on City Policy." *American Journal of Political Science*. 55(2):326-339.
9. Daniel J. Hopkins. 2011. "The Limited Local Impacts of Ethnic and Racial Diversity." *American Politics Research*. 39(2):344-379.
8. Daniel J. Hopkins. 2010. "Politicized Places: Explaining Where and When Immigrants Provoke Local Opposition." *American Political Science Review*. 104(1):40-60.
7. Daniel J. Hopkins and Gary King. 2010. "A Method of Automated Nonparametric Content Analysis for Social Science." *American Journal of Political Science*. 54(1):229-247.

6. Daniel J. Hopkins and Gary King. 2010. "Improving Anchoring Vignettes: Designing Surveys to Correct Interpersonal Incomparability." *Public Opinion Quarterly*. 74(2):201-222.
5. Daniel J. Hopkins. 2009. "No More Wilder Effect, Never a Whitman Effect: Why and When Polls Mislead about Black and Female Candidates." *Journal of Politics*. 71(3):769-781.
4. Daniel J. Hopkins. 2009. "The Diversity Discount: How Increasing Ethnic and Racial Diversity Dampens Support for Tax Increases." *Journal of Politics*. 71(1):160-177.
3. Daniel J. Hopkins. 2009. "Partisan Reinforcement and the Poor: The Impact of Context on Attitudes toward Poverty." *Social Science Quarterly*. 90(3):744-764.
2. Daniel J. Hopkins. 2009. "Racial Contexts' Enduring Influence on Attitudes toward Poverty." *Social Science Quarterly*. 90(3):770-776.
1. Simmons, Beth A. and Daniel J. Hopkins. 2005. "The Constraining Power of International Treaties: Theory and Methods." *American Political Science Review*. 99(4):623-631.

EDITED BOOKS

Daniel J. Hopkins and John Sides, editors. 2015. *Political Polarization in American Politics*. Bloomsbury Academic: New York, NY.

OTHER ACADEMIC WRITING

Kirk Bansak, Jens Hainmueller, Daniel J. Hopkins, and Teppei Yamamoto. 2021. "Conjoint Survey Experiments." In *Advances in Experimental Political Science*, James N. Druckman and Donald P. Green (eds.). Cambridge University Press: New York, NY.

Review of "*The Cities on the Hill*" by Thomas K. Ogorzalek. 2019. *Perspectives on Politics*.

SELECT PRESENTATIONS

- APSA: 2002, 2005-2010, 2012-2016, 2018-2019, 2022
- MPSA: 2004, 2005, 2007, 2009-2016, 2021-2022
- NEPSA: 2003, 2004
- CELS: 2009
- PRIEC: 2021
- Summer Methods Meeting: 2004-9 (invited poster presentations); 2011 (paper); 2012 (plenary session); 2013 (paper); 2015 (paper); 2017-2021 (paper); 2021 (paper); 2022 (discussant)
- Text as Data Conference, 2012 (paper); 2019 (paper), 2021 (poster), 2022 (poster)

- **Political Networks Conference:** 2009
- **International Society for Political Psychology:** 2021
- **Behavioral Seminar Series**, Geary Institute, University College Dublin, March 6th, 2007
- **Latino National Survey Junior Scholars Conference**, Cornell University, November 3rd, 2007
- **American Politics Seminar**, Yale University, February 27th, 2008
- **Columbia Quantitative Political Science Seminar**, March 27th, 2008
- **Works in Progress Seminar**, MIT Department of Political Science, September 26th, 2008
- **Race and the American Voter Conference**, Harris School, University of Chicago, December 11th, 2008
- **American Politics Seminar**, Dartmouth College, March 6th, 2009
- **Applied Statistics Seminar**, Harvard University, March 11th, 2009
- **American Politics Seminar**, Georgetown University, March 13th, 2009
- **American Politics Seminar**, Yale University, April 15th, 2009
- **Political Psychology and Behavior Workshop**, Harvard University, May 1st, 2009
- **American Politics Seminar**, University of Virginia, October 16th, 2009
- **American Politics Seminar**, George Washington University, February 19th, 2010
- **Triangle Political Methodology Seminar**, University of North Carolina, April 8th, 2010
- **Dreher Colloquium**, The Ohio State University, May 21st, 2010
- **Harvard-Manchester Social Change Workshop**, University of Manchester, June 14th, 2010
- **Ethnic Politics Workshop**, George Washington University, October 15th, 2010
- **Invited Presentation**, Center for AIDS Research, New York University, October 18th, 2010
- **American Politics Workshop**, University of Chicago, February 16th, 2011
- **Immigration Conference**, Quantitative Institute for Social and Policy Research, University of Kentucky, March 10th, 2011
- **American Politics Summer Conference**, Yale University, June 23rd, 2011
- **Department of Political Science Seminar**, Emory University, November 15th, 2011
- **DC Area American Politics Seminar**, George Washington University, January 9th, 2012
- **NYU CESS 5th Annual Experimental Political Science Conference**, New York University, March 3rd, 2012
- **American Politics and Political Institutions and Center for Comparative Immigration Studies Seminar**, University of California San Diego, May 23rd, 2012
- **Symposium the on Politics of Immigration, Ethnicity, and Race**, Yale University, October 12th, 2012
- **Latinos in the 2012 Election**, Princeton University, October 25th, 2012
- **American Politics Workshop**, Stanford University, January 9th, 2013
- **Immigrants, Citizens, and the Law**, Keynote Address, Brigham Young University, January 24th, 2013
- **Spatial Analysis Seminar**, University of Michigan, February 1st, 2013
- **Race, Ethnicity, and Immigration Colloquium**, UC Berkeley, March 8th, 2013
- **Computational Linguistics Colloquium**, University of Maryland, March 13th, 2013
- **Campaigns and Elections Seminar**, Temple University, April 22nd, 2013
- **New Immigrant Destinations Conference**, Trinity College, October 10th, 2013
- **Social Policy and Inequality Seminar**, Harvard University, November 18th, 2013
- **American Politics Seminar**, Dartmouth College, January 12th, 2014
- **American Politics Workshop**, University of North Carolina at Chapel Hill, January 24th, 2014
- **American Politics Seminar**, Duke University, April 11th, 2014
- **Center for the Study of Democratic Politics Seminar**, Princeton University, April 17th, 2014
- **Center for the Study of American Politics**, Yale University, October 1st, 2014
- **Class, Race, and Ethnicity Workshop**, Michigan State University, March 20th, 2015
- **Vanderbilt Department of Political Science**, Vanderbilt University, March 26th, 2015
- **Harvard Conference on Political Geography**, Harvard University, May 9th, 2015
- **International Methods Colloquium**, Society for Political Methodology, October 23rd, 2015
- **American Politics Workshop**, University of Chicago, December 2nd, 2015
- **Centre for the Study of Democratic Citizenship**, McGill University, January 29th, 2016
- **Computational Linguistics and Lunch**, University of Pennsylvania, March 17th, 2016
- **Political Science Speaker Series**, University of Southern California, April 22nd, 2016

- **Political Economy Seminar**, Graduate School of Business, Stanford University, April 25th, 2016
- **Invited Seminar**, Department of Political Science, University of Copenhagen, May 11th, 2016
- **Identity Politics Research Group Meeting**, Columbia University, May 26th, 2016
- **Comparative Approaches to Immigration, Ethnicity, and Integration**, Yale University, June 15th, 2016
- **Elihu Katz Colloquium**, Annenberg School for Communication, University of Pennsylvania, February 3rd, 2017
- **Center for Political Studies**, University of Michigan, March 8th, 2017
- **Rubin Lecture Series**, University of Michigan, March 9th, 2017
- **Kopf Conference on Diverse Perspectives toward Immigration and Racial/Ethnic Minorities**, Arizona State University, March 31st, 2017
- **Electoral Realignments in Advanced Democracies**, Princeton University, May 20th, 2017
- **Joint Statistical Meeting**, Late-breaking panel presentation, Baltimore, Maryland, July 31st, 2017
- **Center for the Study of Democratic Politics**, Princeton University, October 19th, 2017
- **Mershon Center's 2016 Election Conference**, The Ohio State University, November 3rd, 2017
- **Behavioral Insights from Text Conference**, Wharton School of the University of Pennsylvania, January 12th, 2018
- **Invited Seminar**, Department of Government, Cornell University, February 23rd, 2018
- **Invited Seminar**, Department of Political Science, George Washington University, March 9th, 2018
- **Public Policy Breakfast**, Washington University, March 20th, 2018
- **Invited Seminar**, Department of Politics, New York University, April 26th, 2018
- **Invited Seminar**, Media Lab, Massachusetts Institute of Technology, October 4th, 2018
- **Invited Seminar**, ETH-Zürich and the University of Zürich, December 13th, 2018
- **Invited Seminar**, American Politics Workshop, University of Wisconsin, April 1st, 2019
- **Invited Seminar**, Law, Economics, and Organization Workshop, Yale Law School, February 27th, 2020
- **Invited Seminar**, American and Comparative Political Behavior Workshop, Yale University, February 28th, 2020
- **Invited Seminar**, American and Comparative Politics Workshop, Texas A&M University, March 2nd, 2020
- **Invited Seminar**, Rutgers Computational Social Science Institute, June 18th, 2020
- **Invited Seminar**, Berkeley Demography Brownbag, October 14th, 2020
- **Invited Seminar**, Washington University American Politics Workshop, November 17th, 2020
- **Politics and Computational Social Science**, Northeastern University, August 11th, 2021
- **Virtual Intergroup Relations Workshop**, November 19th, 2022
- **Asian POLMETH**, January 6th, 2022
- **Monash-Warwick-Zurich Text-as-Data Workshop**, February 17th, 2022
- **Russell Sage Foundation**, March 2nd, 2022
- **Columbia University Methodology Colloquium**, April 22nd, 2022
- **POLMETH Europe**, June 11th, 2022
- **American Political Economy**, August 3rd, 2022
- **Invited Seminar**, American University, November 18th, 2022

GRANTS AND FELLOWSHIPS

- Co-PI, NSF award, "Robust Learning and Inference Protocols for Recuperating from Information Pollution. With Dan Goldwasser and Dan Roth, PIs (2022)
- Awarded support for participation in the Causal Inference for Social Impact Lab's Data Challenge (2022)
- Awarded Leonard Davis Institute for Health Economics COVID-19 Rapid Reward to study partisan polarization and public opinion on measures to address spread of coronavirus (2020)
- Awarded University of Pennsylvania School of Arts and Sciences "Making a Difference in Diverse Communities" grant to study voter turnout in Philadelphia (2018)

- Awarded Russell Sage Foundation grant to study attitudes toward the Affordable Care Act (2018)
- Awarded Russell Sage Foundation grant to study perceived discrimination and its political impacts among Asian Americans and Latinos (2016)
- Awarded Russell Sage Foundation grant to study attitudes toward the Affordable Care Act (2016)
- Senior Fellow, Leonard Davis Institute of Health Economics (2015-2016)
- Awarded Russell Sage Foundation grant to study perceptions of discrimination and the acquisition of partisanship among first-generation immigrants with Efren Perez and Cheryl Kaiser (2014)
- Awarded Georgetown University Grant-in-Aid to study the nationalization of American voting behavior (2013)
- Book Incubator Grant of the Department of Government, Georgetown University (2013)
- Senior personnel, Computing Research Infrastructure grant from the National Science Foundation to Georgetown University (2012)
- Awarded Georgetown University Grant-in-Aid to study attitudes toward political candidates (2012)
- Awarded Georgetown University Grant-in-Aid to study attitudes toward prospective immigrants (2011)
- Principal Investigator, Russell Sage Foundation Presidential Authority Award to study perceptions of discrimination among immigrants with co-Principal Investigators Victoria Esses, Cheryl Kaiser, Helen Marrow, and Monica McDermott (2011)
- Awarded Russell Sage Foundation Presidential Authority Award to study responses to foreign languages (2010)
- Awarded Georgetown University Summer Academic Grant (2010)
- Awarded Georgetown Center for New Designs in Learning and Scholarship Curriculum Improvement Grant (2009-10)
- Awarded Marguerite Ross Barnett Research Grant from American Political Science Association (2008)
- Awarded Center for American Political Studies Dissertation Fellowship (2005)
- Awarded Harvard Graduate Society Summer Pre-Dissertation Fellowship (2005)
- Awarded Doctoral Fellowship in Inequality and Social Policy (2004)

TEACHING

America and Russia, Archetypes of Democracy and Autocracy?

- Undergraduate first-year seminar
- Overall Rating from Students: 4.80 on a 1 to 5 scale Fall 2022 (U. of Pennsylvania)

Introduction to Data Science

- Undergraduate first-semester data science course in R
- Overall Rating from Students: 3.92 on a 1 to 5 scale Fall 2021 (U. of Pennsylvania)
- Overall Rating from Students: 4.14 on a 1 to 5 scale Fall 2019 (U. of Pennsylvania)
- Overall Rating from Students: 4.18 on a 1 to 5 scale Fall 2018 (U. of Pennsylvania)
- Overall Rating from Students: 4.49 on a 1 to 5 scale Fall 2017 (U. of Pennsylvania)

Analysis of Political Data II

- Undergraduate second-semester quantitative methods course
- Overall Rating from Students: 4.80 on a 1 to 5 scale Spring 2015 (Georgetown)

Quantitative Analysis II

- Graduate second-semester quantitative methods course
- Overall Rating from Students: 4.46 on a 1 to 5 scale Spring 2019 (U. of Pennsylvania)
- Overall Rating from Students: 4.29 on a 1 to 5 scale Spring 2017 (U. of Pennsylvania)
- Overall Rating from Students: 5.00 on a 1 to 5 scale Spring 2014 (Georgetown)
- Overall Rating from Students: 4.64 on a 1 to 5 scale Spring 2012 (Georgetown)

- Overall Rating from Students: 4.86 on a 1 to 5 scale Spring 2011 (Georgetown)
- Overall Rating from Students: 4.85 on a 1 to 5 scale Spring 2010 (Georgetown)

Quantitative Analysis III

- Graduate third-semester quantitative methods course
- Overall Rating from Students: 4.83 on a 1 to 5 scale Fall 2020 (U. of Pennsylvania)
- Overall Rating from Students: 4.65 on a 1 to 5 scale Spring 2018 (U. of Pennsylvania)
- Overall Rating from Students: 4.40 on a 1 to 5 scale Spring 2016 (U. of Pennsylvania)
- Overall Rating from Students: 5.00 on a 1 to 5 scale Fall 2014 (Georgetown)
- Overall Rating from Students: 5.00 on a 1 to 5 scale Fall 2013 (Georgetown)

Political Behavior

- Ph.D. seminar
- Overall Rating from Students: 5.00 on a 1 to 5 scale Spring 2014 (Georgetown)

The Changing American Electorate, 1960-2008

- Undergraduate lecture course
- Overall Rating from Students: 4.09 on a 1 to 5 scale Fall 2022 (U. of Pennsylvania)
- Overall Rating from Students: 4.28 on a 1 to 5 scale Spring 2017 (U. of Pennsylvania)
- Overall Rating from Students: 4.58 on a 1 to 5 scale Fall 2014 (Georgetown)
- Overall Rating from Students: 4.81 on a 1 to 5 scale Fall 2013 (Georgetown)
- Overall Rating from Students: 4.67 on a 1 to 5 scale Fall 2010 (Georgetown)
- Overall Rating from Students: 4.55 on a 1 to 5 scale Fall 2009 (Georgetown)
- Overall Rating from Students: 4.43 on a 1 to 5 scale Spring 2008 (Yale)

Contemporary American City

- Undergraduate seminar
- Overall Rating from Students: 4.53 on a 1 to 5 scale Fall 2017 (U. of Pennsylvania)
- Overall Rating from Students: 4.69 on a 1 to 5 scale Fall 2015 (U. of Pennsylvania)
- Overall Rating from Students: 4.70 on a 1 to 5 scale Spring 2012 (Georgetown)
- Graduate seminar
- Overall Rating from Students: 5.00 on a 1 to 5 scale Fall 2009 (Georgetown)
- Undergraduate seminar Spring 2009 (Harvard)

Race in American Politics

- Undergraduate seminar
- Overall Rating from Students: 4.92 on a 1 to 5 scale Spring 2011 (Georgetown)

Senior Thesis Writers' Workshop

- Undergraduate seminar
- Overall Rating from Students: 4.82 on a 1 to 5 scale Fall 2006 (Harvard)

Advanced Quantitative Methods

- Teaching assistant, graduate second-semester quantitative methods course
- Overall Rating from Students: 4.92 on a 1 to 5 scale Spring 2006 (Harvard)

American Public Opinion

- Teaching assistant, undergraduate lecture course
- Overall Rating from Students: 4.68 on a 1 to 5 scale Fall 2004 (Harvard)

MENTORSHIP

Ph.D. Dissertation Committees

- Evelyne Brie (chair), Breanna Gray (chair), Eunji Kim (co-chair), Hajer Al-Faham, Maxwell Allamong, Sabrina Arias, Hamutal Bernstein, Ryan Boeka, Vivienne Born, Rachel Blum, Kimberly Cardenas, Micah Jensen, Karin Kitchens, Justin Koch, Clara Lee, Amber Mackey, Angie Ocampo, Jacob Pearl, Lindsay Pettingill, Devlin Winkelstein

Post-doctoral Fellows

- M. Brielle Harbin

PATENTS

A System for Estimating a Distribution of Message Content Categories in Source Data

- U.S. Patent 8180717, issued May 15th, 2012
- Jointly held with Gary King and Ying Lu

SERVICE, UNIVERSITY OF PENNSYLVANIA

Member, School of Arts and Sciences Graduate Education Committee (2022)

Chair, Search Committee, Climate/environmental politics (2022)

Member, "Diversity, Equity, and Inclusion" Committee (2020-2022)

Member, "Diversity in Seminars" Committee (2018-2020)

Member, School of Arts and Sciences Phi Beta Kappa Award Committee (2019-2020)

Co-coordinator, Philadelphia Behavioral Science Initiative (January 2016 – present)

Co-Coordinator, Philadelphia Behavioral Science Initiative (January 2016 – present)

Member/Chair, Curriculum Committee, School of Arts and Sciences (Fall 2015-June 2018)

Member, Faculty Advisory Committee on Information Technology (January 2016 – present)

Coordinator, American Politics Workshop (2016-2018)

Coordinator, American Politics Working Group (2015-present)

OTHER ACADEMIC SERVICE

Associate Editor, *Journal of Experimental Political Science* (2023-present)

Associate Editor, *Political Analysis* (2018-present)

Associate Editor, *Political Behavior* (2018-2022)

Past President, Political Psychology Section of APSA (2020-2022)

President, Political Psychology Section of APSA (2018-2020)

President-Elect, Political Psychology Section of APSA (2016-2018)

Editorial Board, *State Politics and Policy Quarterly* (2011-2014)

Associate Editor, *R&P* (2013-2017)

Occasional Contributor, *The Monkey Cage Blog* (Washington Post); *FiveThirtyEight*

Undergraduate Chair, Political Science Department	<i>2018 – 2020</i>
Coordinator, Georgetown American Politics Seminar	<i>2012; 2014</i>
Member, MA Program Director Search Committee	<i>2014</i>
Coordinator, DC Area American Politics Workshop	<i>2011 – 2014</i>
Government Department Admissions Committee	<i>2014 – 2015</i>
Government Department Planning and Budget Committee	<i>2010 – 2012</i>
Tutor, Harvard College	<i>2004 – 2006</i>
Concentration Advisor, Government Department	<i>2004 – 2006</i>
Proctor, Harvard College	<i>2002 – 2004</i>

LANGUAGES

- Fluent in Spanish; Proficient in Russian